The final Office Action dated November 10, 2004 ("Office Action") rejected all the pending claims of the instant application. Independent Claim 16 and dependent Claim 17 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Spies et al., U.S. Patent No. 5,689,565. In addition, independent Claim 1 and dependent Claims 2-7 and 12-15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Shrader et al., U.S. Patent No. 6,374,359, in view of Quimby, U.S. Patent No. 5,367,573, and further in view of Hardy et al., U.S. Patent No. 5,623,546. Additionally, Claims 8-11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Shrader et al., as modified by Quimby and Hardy et al., and further in view of Becker et al., U.S. Patent No. 6,557,038. This Response sets forth arguments as to why applicant believes that the Office's position with respect to the pending claims is incorrect and should be withdrawn.

In order to assist the Office in further understanding the exemplary embodiments of the present invention, the Applicant provides below a summary of the invention, which relates to the various exemplary embodiments of the present invention. This summary supplements the summary of the invention included with Applicant's Amendment, filed June 15, 2004.

It is to be understood that the following summary of the various exemplary embodiments does not define the scope and/or interpretation of any of the claims of this application. Instead, the summary is provided to help the Office better appreciate claim distinctions discussed hereinafter.

Summary of the Invention

Generally, an exemplary embodiment of the present invention relates to a method and apparatus for encoding and storing storage data that minimizes the amount of data transferred between a client computer and a server computer, while at the same time maximizing the amount

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of configuration information transferred. An exemplary embodiment of the present invention makes use of encoding and storing session data in an encoded and encrypted session cookie in order to maximize the amount of configuration information transferred. In particular, an exemplary embodiment of the present invention provides a server computer that encodes session data into a session cookie in a tag-length-value format.

The tag-length-value format encodes data by providing a tag identifying the semantic information that a value represents, the length of the value, and then the value itself. Once the data has been encoded in the tag-length-value format, the server computer encrypts the encoded session data using the modified encryption key. The modified encryption key may be formatted by inserting a secret, such as the user's password or e-mail address, into a standard encryption key at a predefined location. The session cookie is then formed by concatenating the length of a length of the secret, the length of the secret, the secret itself, and the encoded and encrypted session data. The session cookie is then transmitted from the server computer to a client computer, where it is stored.

Figures 4 and 5 of the instant application provide an illustrative data structure according to an exemplary embodiment of the present invention. As is illustrated, an encoded configuration data 310 includes at least a tag 400, a data length 406, and a value 408. The Figures further illustrate that the tag 400 is defined by a separate data length identifier 402 and a data type identifier 404. In one exemplary embodiment, the data length identifier includes an extended tag type value 405.

The specific structure of the exemplary embodiment illustrated in Figures 4 and 5 is very advantageous, inasmuch as tags associated with other configuration data may be accounted for by way of the data length identifier 402, and in particular the extended tag type value 405. A

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detailed discussion of the foregoing may be found on pages 15 and 16 of the specification of the instant application.

<u>Claim Rejection Under 35 U.S.C. § 102(b)</u>

Claims 16 and 17 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Spies et al. For the reasons discussed below, Applicant respectfully submits that the relied upon patent document fails to teach or suggest the recitation of independent Claim 16. Moreover, applicant respectfully submits that the relied upon document is similarly deficient with respect to the rejected dependent claim. Additionally, applicant respectfully submits that the dependent claim is allowable at least due to its dependence upon an allowable independent claim.

Rejection of Independent Claim 16

Independent Claim 16 sets forth a combination of limitations including "a first data field containing data representing a data length identifier <u>and</u> a tag type." (Emphasis added.) Clearly, from the indicated limitation of Claim 16, the "first data field" <u>includes</u> both "<u>a data length identifier</u>" and "<u>a tag type</u>." For the following reasons, the patent relied upon by the Office fails to teach or suggest at least this indicated limitation of independent Claim 16.

Spies et al. teach a cryptography system and method for providing cryptographic services for a computer application. According to Spies et al., and as illustrated in Figure 9 of the patent, a communication data structure may include a data structure 140 used to carry a package that is exchanged between participants, or between a participant and a trusted authority. (See Col. 15, lines 62-65.) The tag-length-value (TLV) data structure 140 <u>consists of three parts: an identifier field 142 (which is also known as the "tag"), a length field 144, and a value field 146)</u>. (Emphasis added.) (See Col. 16, lines 4-6.)

According to the patent, the identifier field or tag 142 is a fixed-sized field that defines or identifies the commensurate data contained in the package. The length field 144 is a variable-

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sized field that contains the length of the commensurate data contained in the package. The length field 144 is preferably an exact byte count of the data contained in a value field 146. As is disclosed by the patent, the three specific fields 142, 144, and 146 are those that are included in the data structure 140. Moreover, the patent document indicates that _only_ these fields 142, 144, and 146 make up the data structure 140. In particular, Spies et al. indicates that the "data structure 140 **consists**" of the three indicated fields. (See Col. 16, line 4.)

As is understood by the discussed portion of the Spies et al. patent, the data structure 140 does not include a field that contains data representing "a data length identifier and a tag type." The identifier field 142 of the data structure 140 relates to the commensurate data contained in the package. This commensurate data does not relate to data that is designed to identify "a tag type." Moreover, the various fields 142, 144, and 146 of the data structure 140 are not individually capable of containing data that identifies two distinct data types. In contrast, the first data field set forth in independent Claim 16 includes "data representing the data length identifier and a tag type." (Emphasis added.)

The "Response to Arguments" section of the current Office Action states that the applicant's arguments with respect to Claims 16 and 17 are unpersuasive. In particular, the Office states that "[t]he claim never states the data structure is required to carry two distinct data types." Furthermore, the Office states that "the definition of TLV (tag-length-value) states that the tag defines the type of data contained, the length consists of the total length of the tag, length, and value, and the value contains the value to be transmitted. One TLV data structure can contain one type of data, while another TLV data structure can contain a different type of data."

The foregoing statements by the Office indicate a lack of understanding of that which is set forth in independent Claim 16. Returning once again to the disclosure of Spies et al., as is illustrated in Figure 9 of the patent, a data structure 140 includes the identifier field 142 (tag), the

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length field 144, and the value field 146. The emphasis here must be what is contained in the identifier field 142 (tag). According to Spies et al., the identifier field 142 is a fixed-size field (e.g., 32 bit) that defines or identifies the commensurate data contained in the package. <u>Nothing further is discussed in relation to the identifier field 142 (tag)</u>. Turning now to recitation of independent Claim 16, the claim requires "a first data field containing data representing a data length identifier <u>and</u> a tag type." (Emphasis added.) As was discussed earlier in this document, clearly the "first data field" includes data that has two parts: "a data length identifier and a tag type." There is nothing in the Spies et al. patent document that would indicate that the identifier field 142 (tag) is capable of including the defined structure as that set forth in independent Claim 16.

With regard to rejection of dependent Claim 17, applicant respectfully submits that this claim is allowable at least due to its dependence upon an allowable independent claim. Moreover, applicant respectfully submits that this claim sets forth recitation that further defines the present invention over the patent document relied upon by the Examiner.

In view of the above comments, Applicant respectfully requests reconsideration and withdrawal of the claim rejection under 35 U.S.C. § 102(b).

<u>Claim Rejections Under 35 U.S.C. § 103(a)</u>

Claims 1-7 and 12-15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Shrader et al., U.S. Patent No. 6,374,359, in view of Quimby, U.S. Patent No. 5,367,573, and further in view of Hardy et al., U.S. Patent No. 5,623,546. Additionally, Claims 8-11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Shrader et al. as modified by Quimby and Hardy et al., and further in view of Becker et al., U.S. Patent No. 6,557,038. For the following reasons, Applicant respectfully submits that these documents, whether standing alone or in combination, fail to teach or suggest the recitation of independent Claim 1.

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Moreover, applicant respectfully submits that these documents are similarly deficient with respect to the dependent claims of the instant application. In addition, Applicant respectfully submits that the dependent claims are allowable at least due to the dependence upon an allowable independent claim.

Independent Claim 1 sets forth a combination of limitations including "concatenating a secret, a length of the secret, and a length of the secret with said encrypted coded configuration data to form a session cookie." For the following reasons, the documents relied upon by the Office, whether taken alone or in combination, fail to teach or suggest at least this indicated limitation of independent Claim 1.

Shrader et al. teaches the dynamic use and validation of HTTP cookies for authentication. According to Shrader et al., a cookie value routine 42 is initiated when a server-driven graphical user interface verifies a username and a password sent to thereto from a login panel of a user's web browser. The cookie value routine 42 constructs a cookie value that includes a username, password, and IP address. (See Col. 7, lines 16-21.)

Initially, applicant would like to point out that the current Office Action was made final prematurely. The Office is respectfully reminded that if the Examiner issues a new rejection, then an Office Action that includes such a new rejection may not be made final. See 37 C.F.R. § 1.113; M.P.E.P. § 706.07. In the Office Action dated March 23, 2004, on page 4 thereof, the Office recognized that Schrader et al. fails to teach or suggest "concatenating a secret, a length of the secret, and the length of the secret with said encrypted coded configuration data to form a session cookie." (Emphasis added; see Claim 1.) More specifically, the Office indicates that "[t]he act of supplying the length of the length of a field only adds more validation, therefore the extra validation fields are obvious." In the applicant's Amendment filed June 15, 2004, the propriety of an obviousness rejection, including such an unsupported statement, was raised.

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In response to the traversal of the rejection, the Office has modified the rejection of Claims 1-7 and 12-15 under 35 U.S.C. § 103(a). The change in the rejection was <u>not</u> necessitated by an amendment to the claims by the Applicant. Instead, perhaps recognizing the deficiency of the rejection under 35 U.S.C. § 103(a), the Office modified the rejection in order to attempt to set forth a more substantiated line of reasoning. It is the Applicant's position that this is only permissible if the Office Action, including the modified rejection, is made non-final. <u>Accordingly, Applicant respectfully requests withdrawal of the finality of the current Office Action.</u>

The modified rejection of Claims 1-7 and 12-15 under 35 U.S.C. § 103(a) now states that Schrader et al. teaches "[c]oncatenating a secret, a length of the secret, and the length of the length of the secret with said encrypted encoded configuration data to form a session cookie (Col. 7, lines 16-21, see response to arguments below)." (See page 3 of current Office Action.) In the response to the arguments, found on page 12 of the current Office Action, the Office states that "[t]he length field would then also be dynamic in size, so a length of the length field, which is static, could describe the length field, which then describes the cookie data." This revised reasoning is still insufficient reasoning to substantiate a rejection under 35 U.S.C. § 103(a).

The Office is respectfully reminded that in order to set forth a proper rejection under 35 U.S.C. § 103(a), each and every element taught by the claim being rejected must be taught by the reference, or the combination of references, being relied upon. If a combination of references is used, the Office must supply reasonable motivation for combining the references. This motivation must come from the references themselves, or may also be based on the expertise of those having ordinary skill in the art. Applicant respectfully submits that the above-indicated conclusionary statement by the Office does not satisfy the rigorous standards required for substantiating a rejection under 35 U.S.C. § 103(a).

In the revised rejection under 35 U.S.C. § 103(a), the Office states that the teachings of Schrader et al. "could" teach a certain limitation set forth in rejected independent Claim 1. (See page 12, last sentence of first paragraph of current Office Action.) Once again, Applicant argues that this is insufficient to support a proper rejection under 35 U.S.C. § 103(a). In particular, an invention is not obvious where an Examiner fails to provide suggestion even if prior art "could" have been combined. In the case of *In re Fritch*, the Federal Circuit stated that this type of conclusionary statement is merely "hindsight reconstruction" that is insufficient and improper reasoning for supporting an obviousness rejection.

Because the additional patent documents have not been relied upon in the Office Action to make up for the indicated deficiencies of Shrader et al., the specifics of these documents have not been discussed herein. However, from even a cursory review of the additional patent documents relied upon, it is clear that the disclosures therein do not make up for the deficiencies discussed in relation to Shrader et al.

Therefore, because Shrader et al. fail to teach or suggest at least "concatenating a secret, a length of the secret, and a length of the length of the secret with said encrypted coded configuration data to form a session cookie," and the supplemental documents relied upon do not make up for this deficiency of Shrader et al., a proper rejection under 35 U.S.C. § 103(a) has not been presented by the Office. Moreover, even assuming *arguendo* that all the elements are taught by the combination of references relied upon by the Office, the rejection under 35 U.S.C. § 103(a) is deficient, as the stringent requirements for establishing obviousness under the Statute have not been met.

In accordance with the above, applicant respectfully requests reconsideration and withdrawal of the rejection of independent Claim 1, and those claims that are dependent thereon.

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In view of the above comments, reconsideration and withdrawal of each of the claim rejections is respectfully requested.

CONCLUSION

In view of the foregoing remarks, Applicant respectfully submits that the present application is now in condition for allowance. Reconsideration and reexamination of this application, as amended, allowance of the rejected claims, and passage of the application to issue at an early date are respectfully solicited. If the Examiner has any questions or comments concerning this application, the Examiner is invited to contact the undersigned at the number below.

Respectfully submitted,

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